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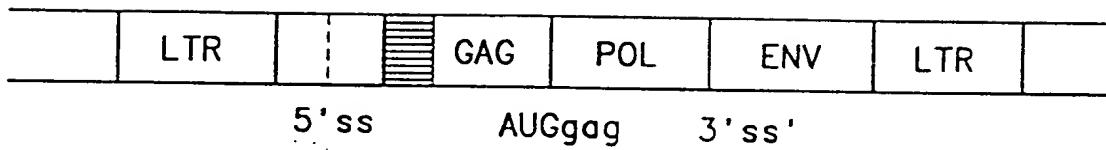


FIG. 1

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FIG. 2A
pLJ

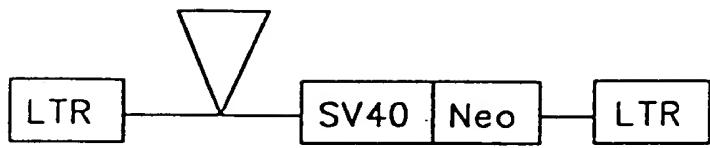


FIG. 2B
pEm

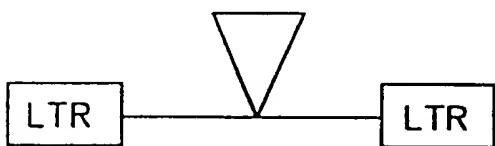


FIG. 2C
MFG

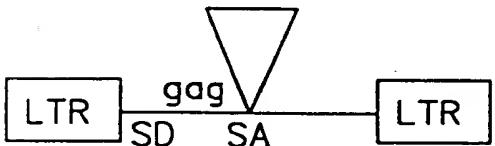
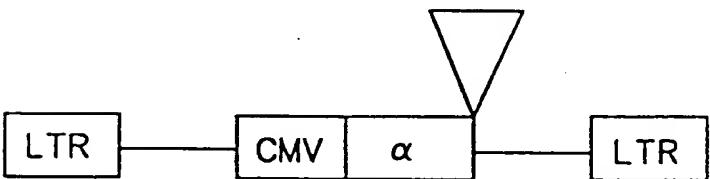


FIG. 2D
αSGC



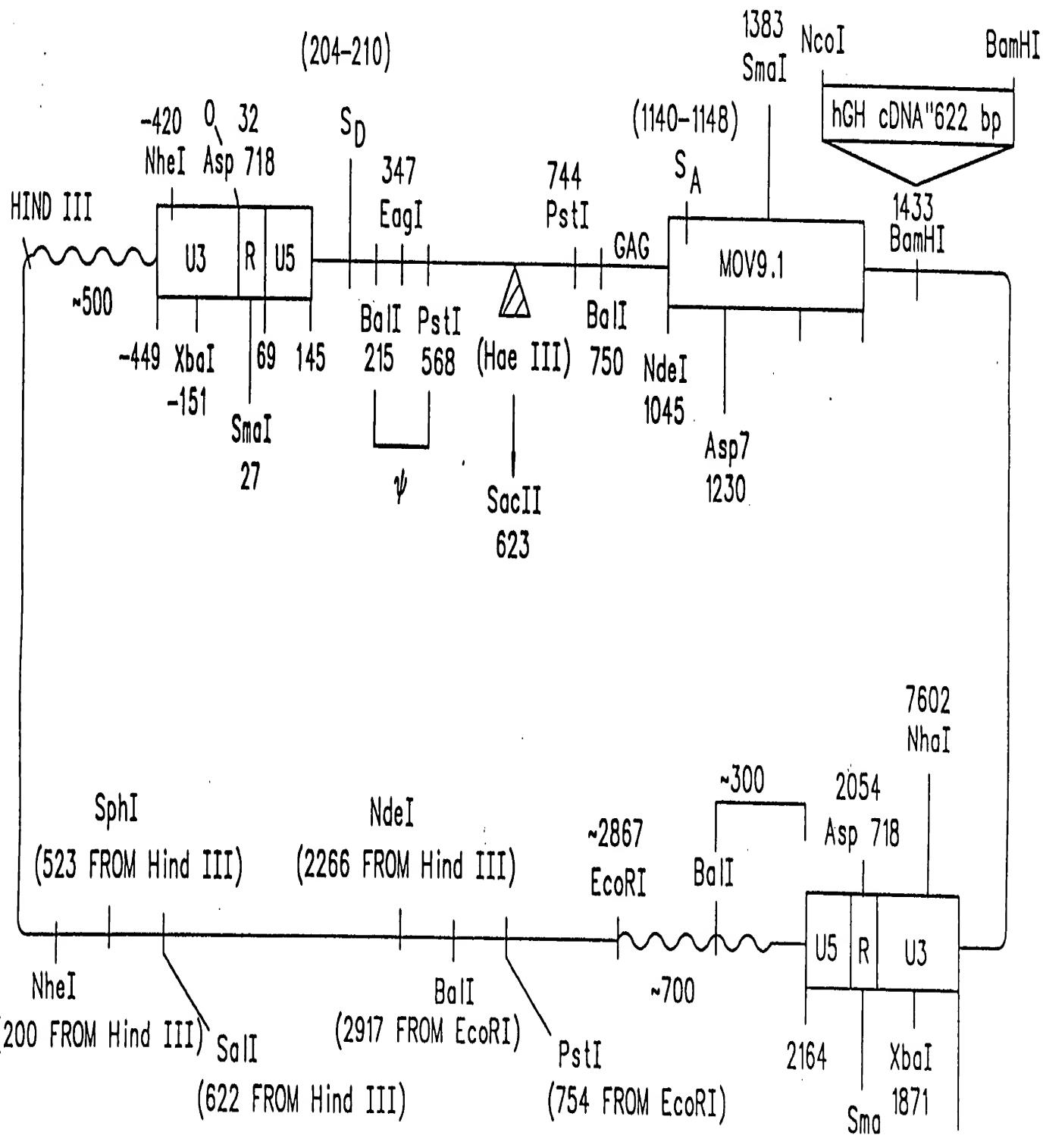


FIG. 3

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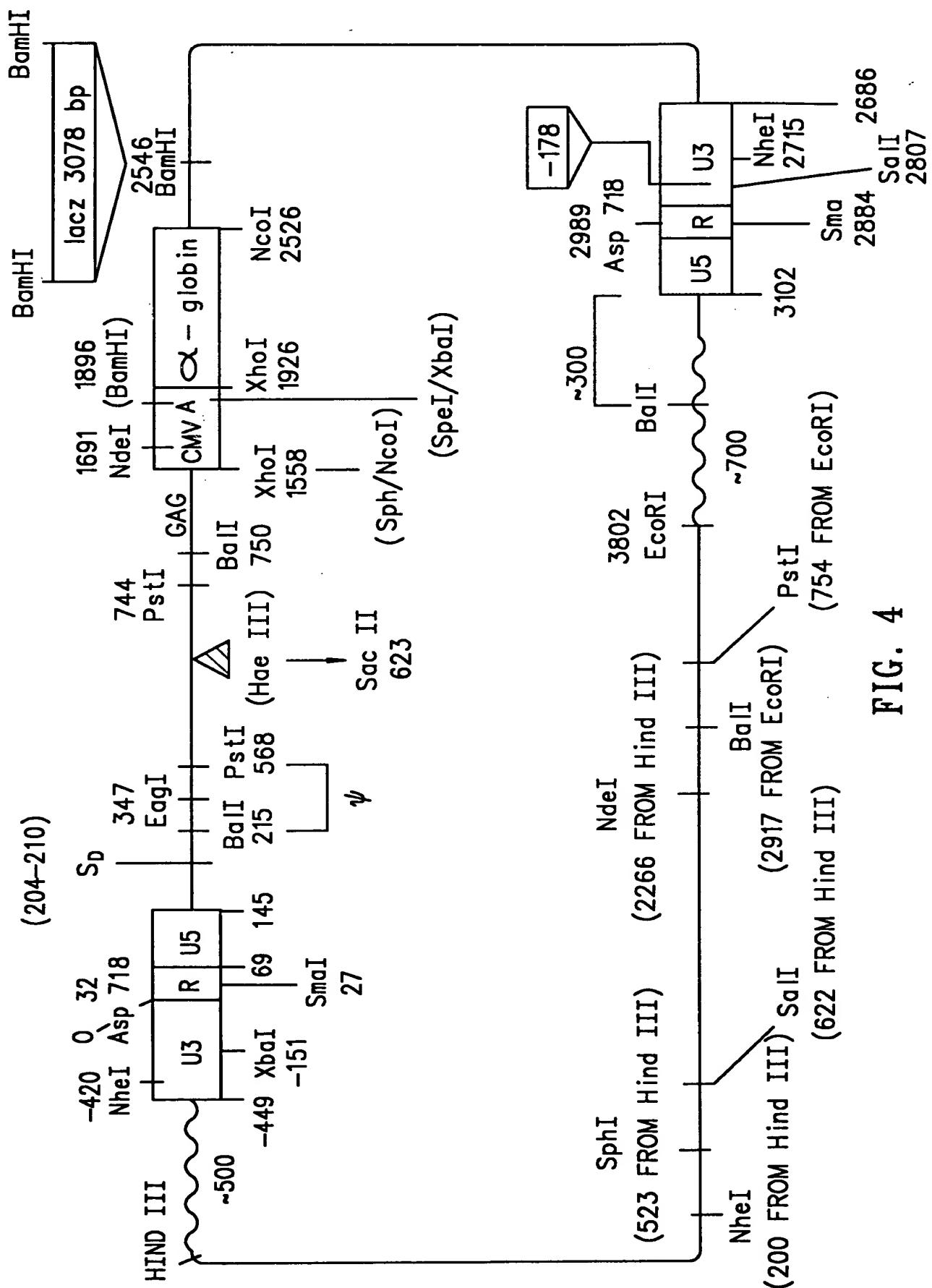
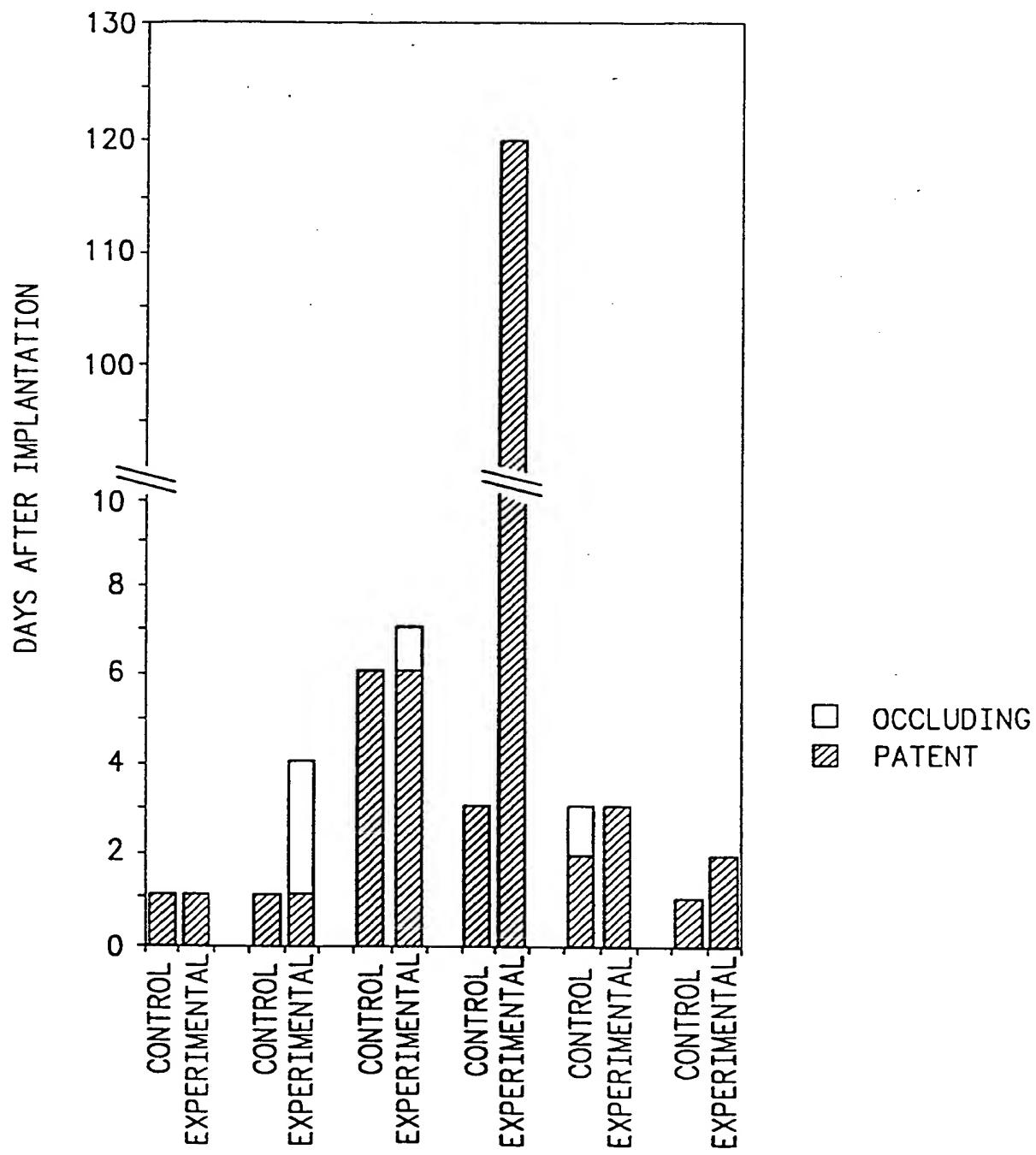


FIG. 4

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FIG. 5



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FIG. 6A

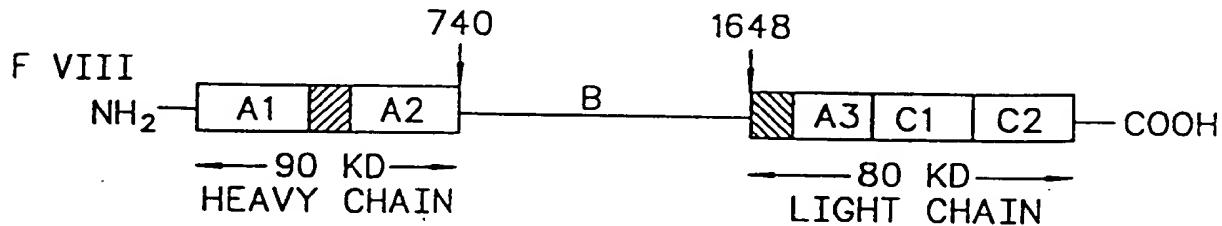


FIG. 6B

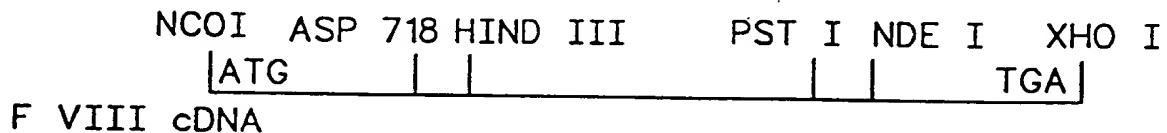
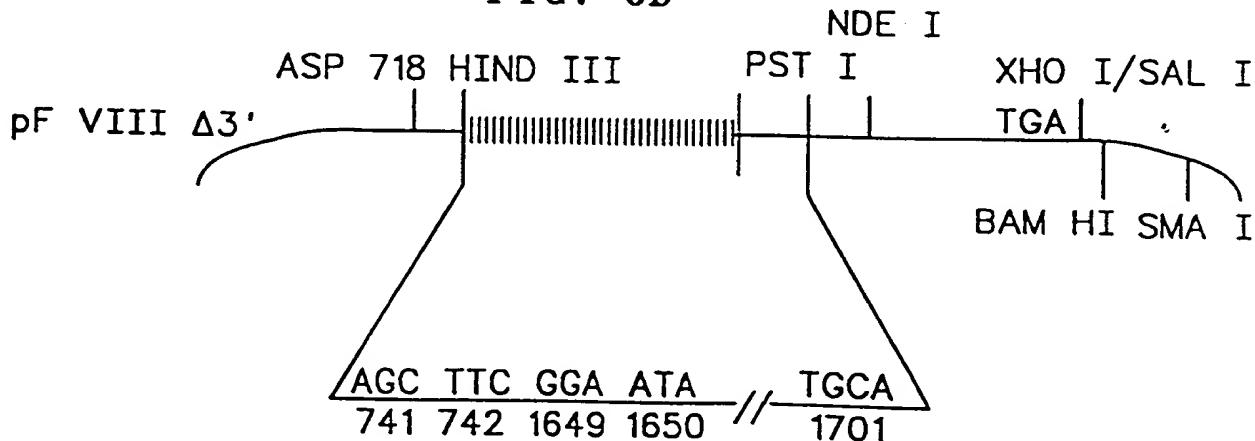


FIG. 6C



FIG. 6D



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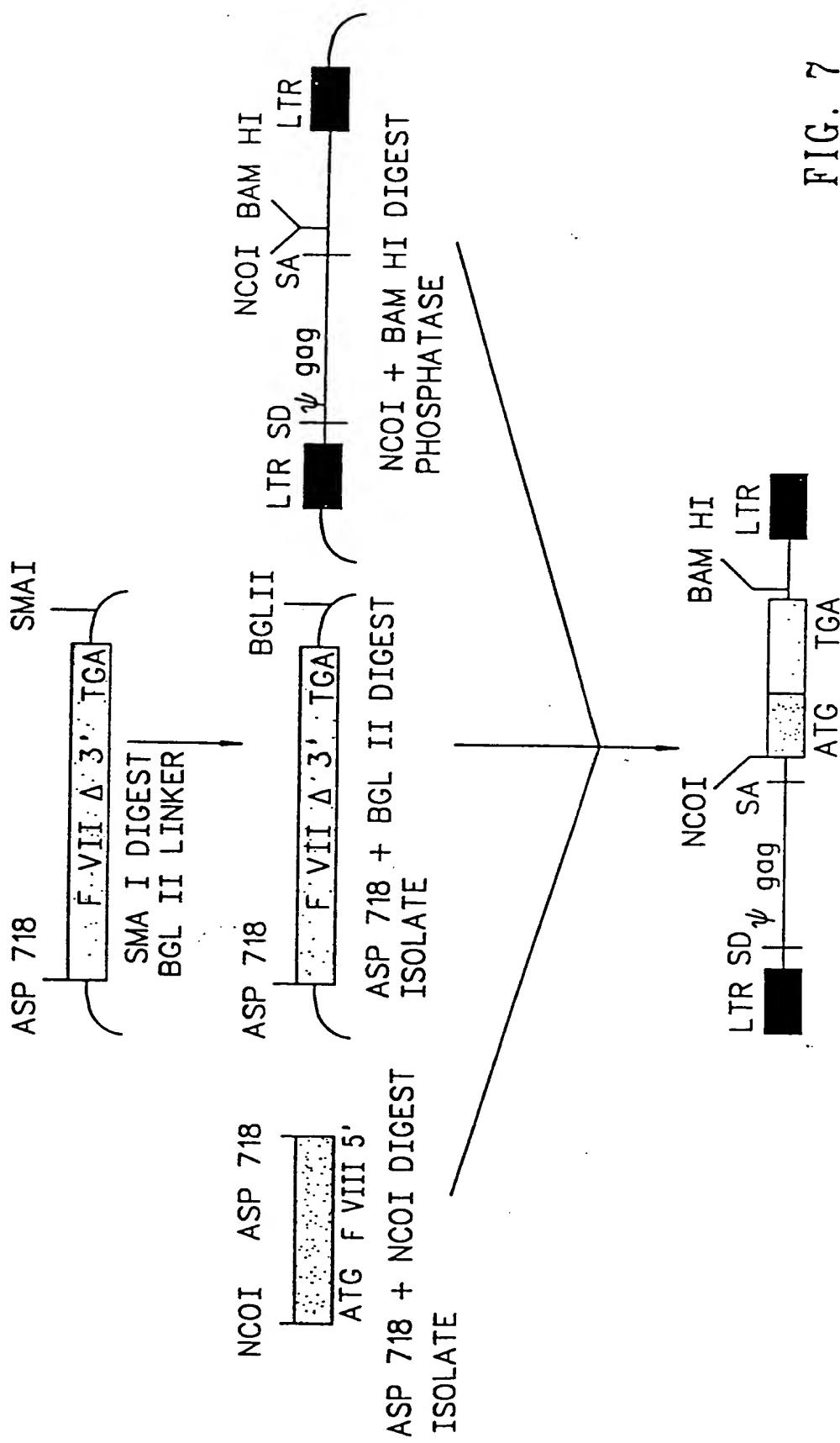


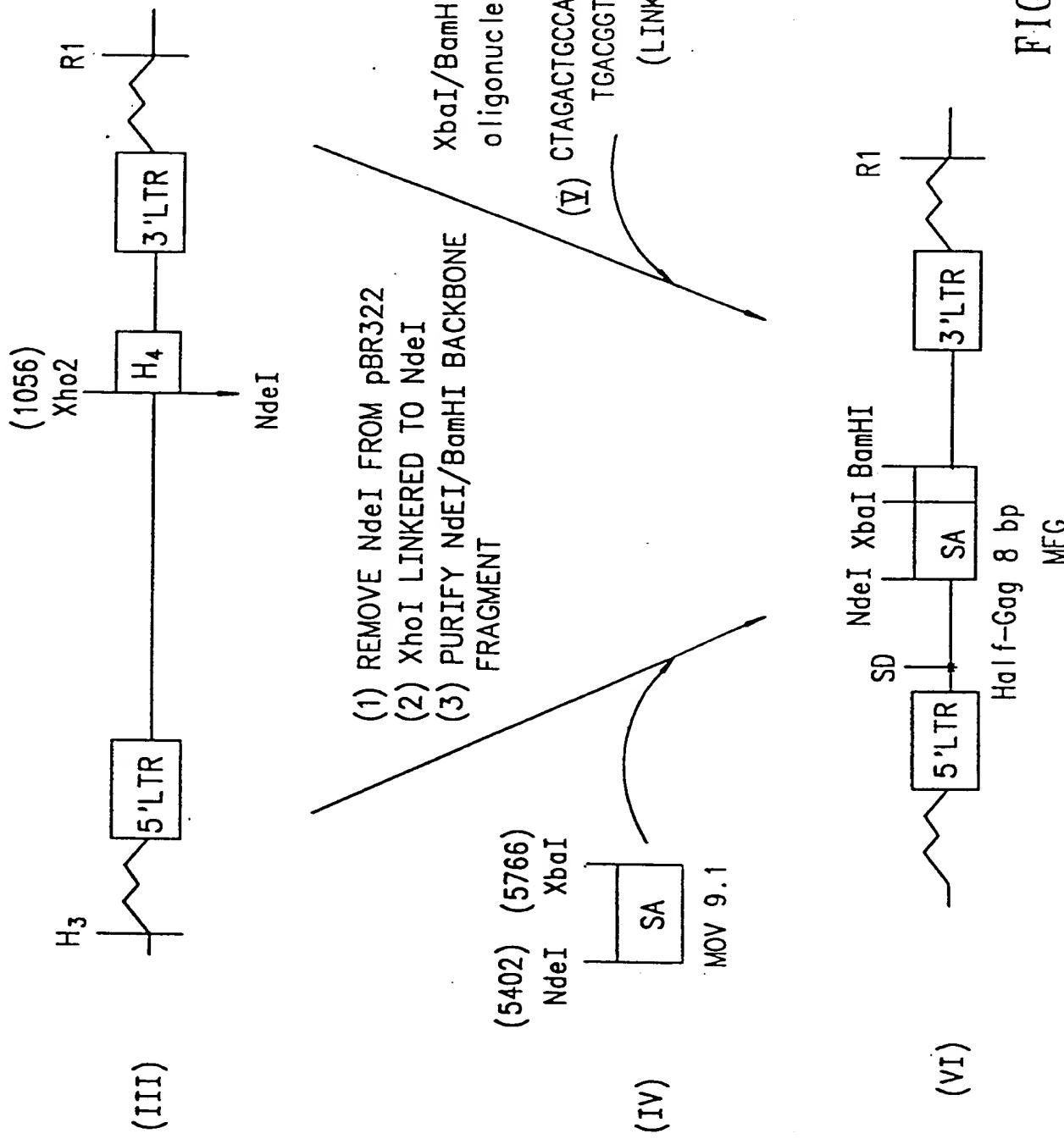
FIG. 7

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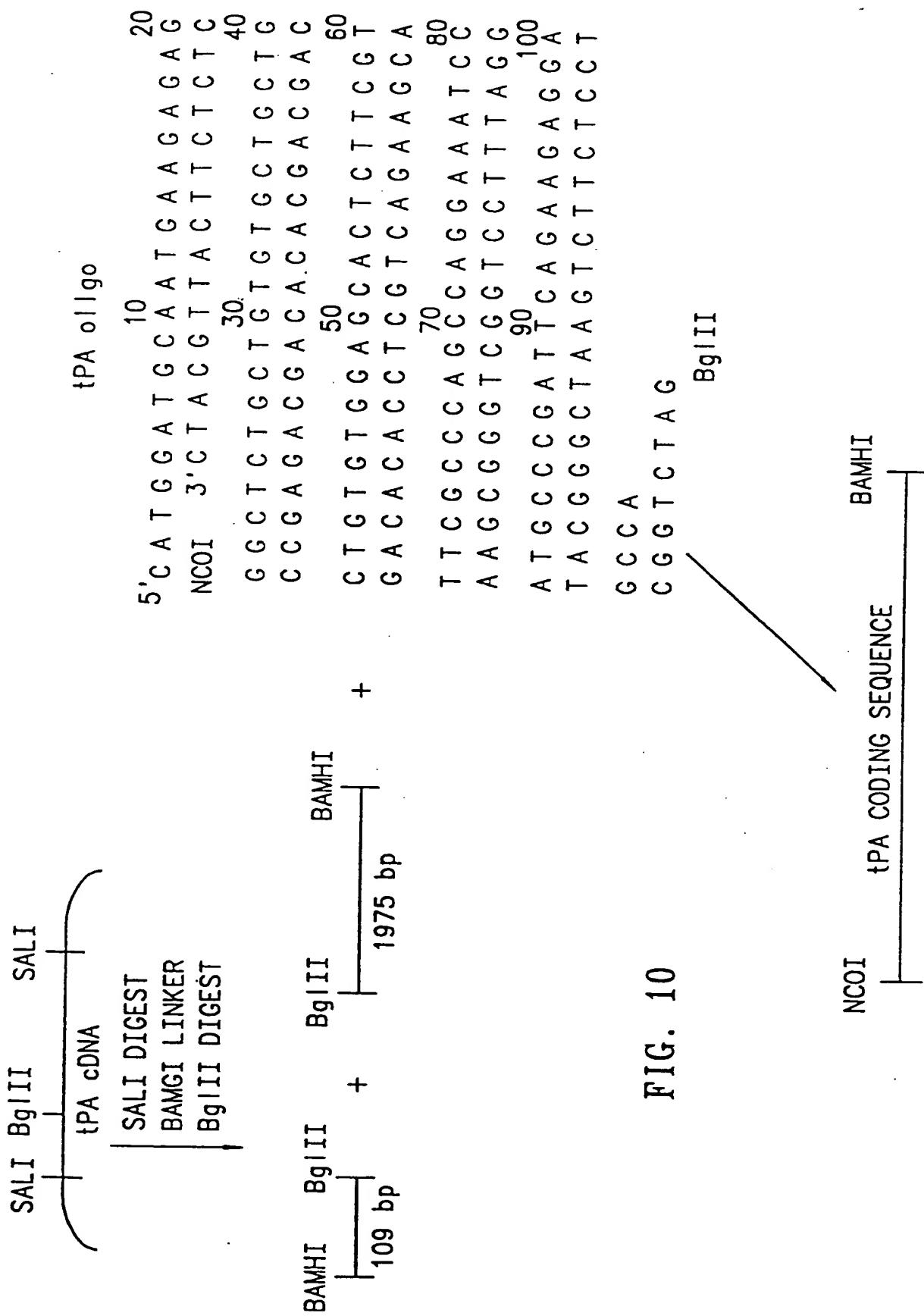


FIG. 8

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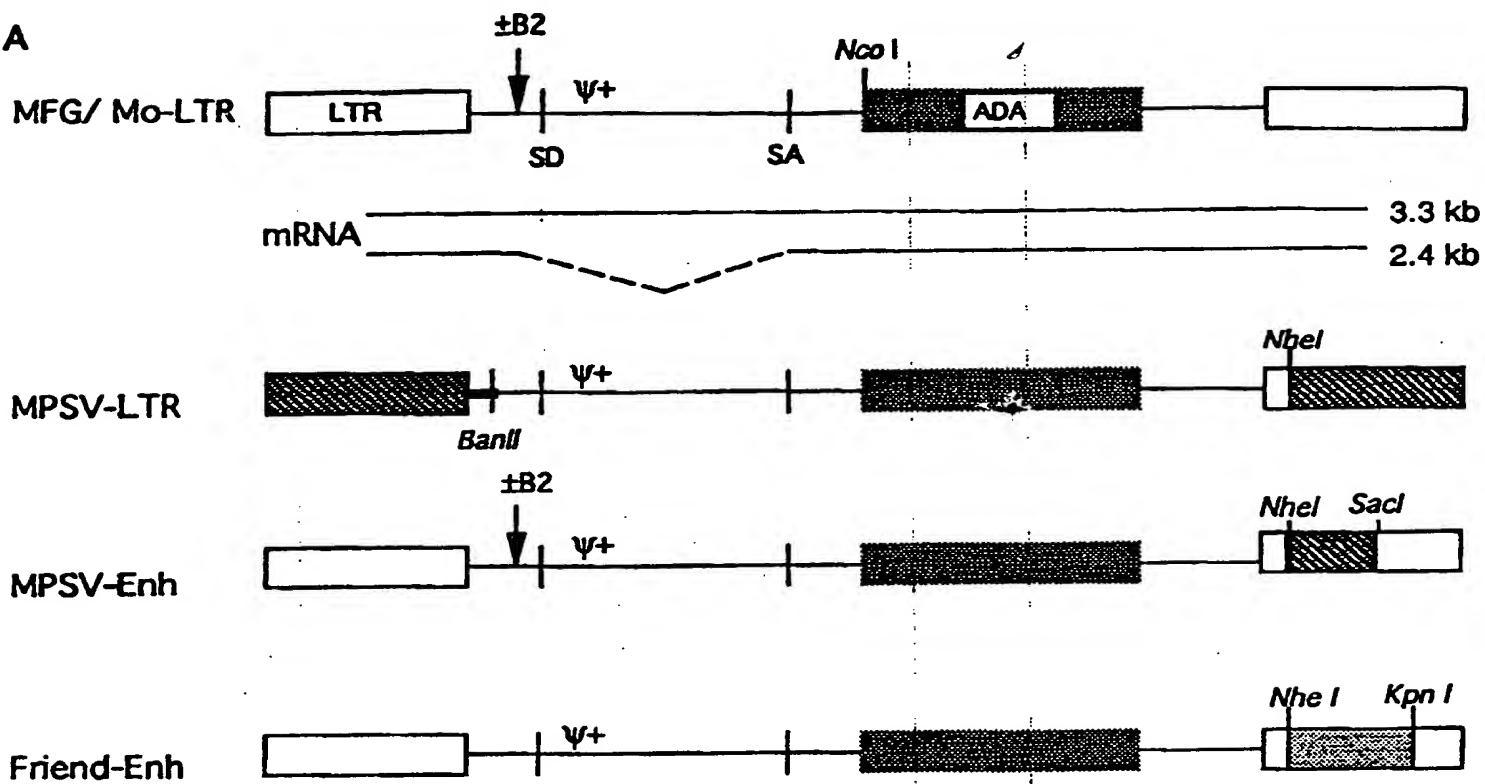
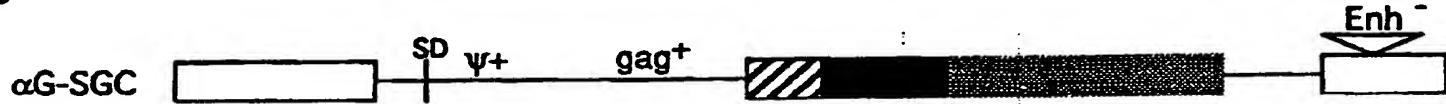


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FIG. 11

A**B****C**

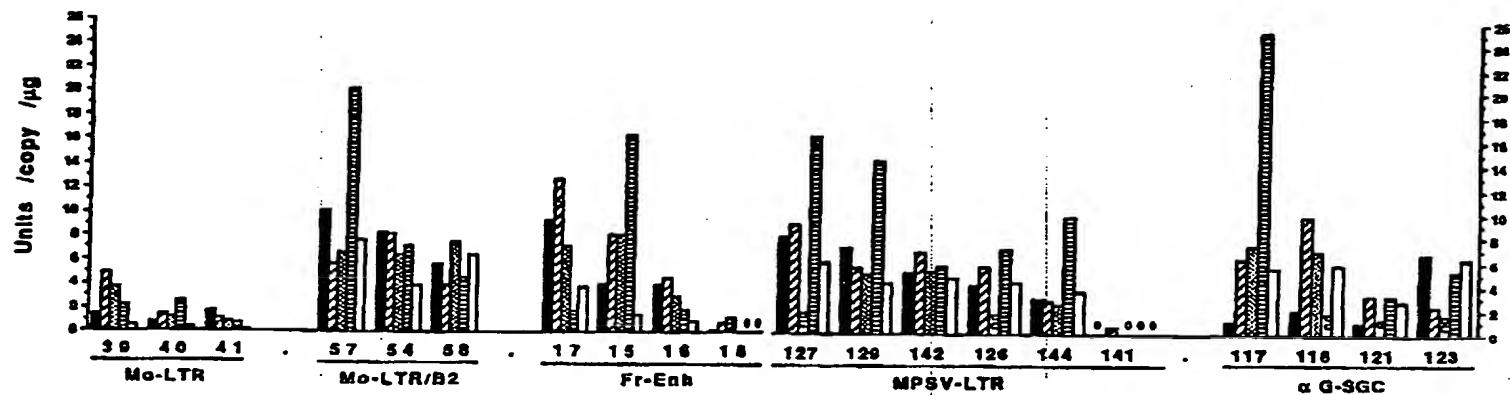
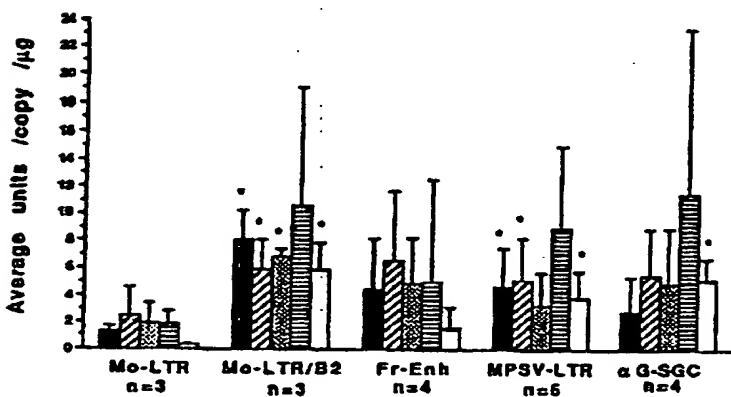
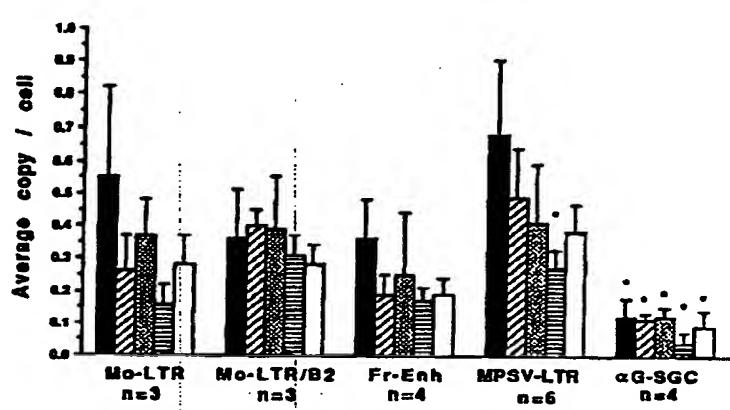
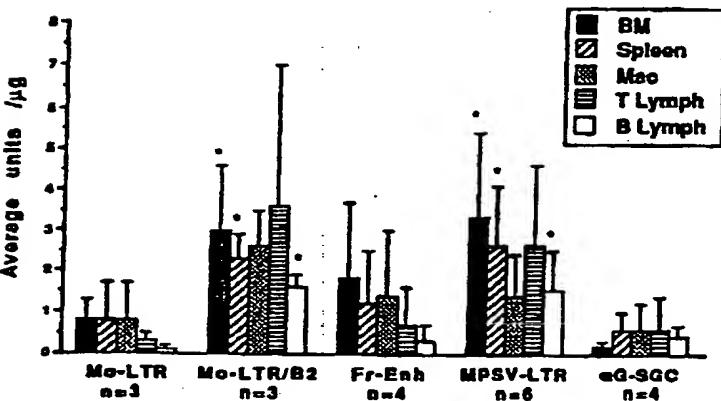
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FIG. 12

| A | | | | | | | | | | | | | | B | | | | | |
|-----------------|-------------------|-----|-----|-----|-----|-----|-----|-----------------|-----|-----|-----|-----|-----|-----|-------------------|------------------|-------------|---------|--|
| | 3×10^6 | | | | | | | 5×10^6 | | | | | | | n_1 | n_2 | n_1+n_2/N | | |
| | 191 days | | | | | | | 191 days | | | | | | | $r \geq 1$ | $1 < r \leq 1/4$ | | | |
| Mo-LTR | #33 | 34 | 35 | 36 | 37 | #38 | 39 | 40 | 41 | 42 | 44 | 45 | 46 | 47 | 48 | control | | | |
| bADA | ► | | | | | | | | | | | | | | | | | | |
| mADA | ► | | | | | | | | | | | | | | | | | | |
| | 4.5×10^6 | | | | | | | 5×10^5 | | | | | | | | | | | |
| Mo-LTR/B2 | 54 | 55 | 56 | 57 | 58 | #59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | control | | | |
| 191 days | | | | | | | | | | | | | | | | | | | |
| | 1.5×10^6 | | | | | | | 5×10^5 | | | | | | | | | | | |
| MPSV-Enh | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 100 | 101 | 102 | 103 | 104 | control | | |
| 206 days | | | | | | | | | | | | | | | | | | | |
| | 2×10^6 | | | | | | | 5×10^5 | | | | | | | | | | | |
| MPSV-Enh/B2 | 72 | 73 | 74 | 75 | 76 | #77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | control | | | |
| 207 days | | | | | | | | | | | | | | | | | | | |
| | 10^6 | | | | | | | 5×10^5 | | | | | | | | | | | |
| Fr-Enh | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | control | | | |
| 184 days | | | | | | | | | | | | | | | | | | | |
| | 1.8×10^6 | | | | | | | 5×10^5 | | | | | | | 2.5×10^5 | | | | |
| MPSV-LTR | 126 | 127 | 128 | 129 | 130 | 131 | 132 | 133 | 134 | 135 | 136 | 137 | 138 | 141 | 142 | 144 | control | | |
| 177 days | | | | | | | | | | | | | | | | | | | |
| | 10^6 | | | | | | | 5×10^5 | | | | | | | 2×10^5 | | | | |
| α -G-SGC | 108 | 109 | 110 | 111 | 112 | 113 | 114 | 115 | 116 | 117 | 118 | 119 | 120 | 121 | 123 | 124 | 125 | control | |
| 170 days | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | 77 | 17 | 94/110 | | |

| C | | | | | | | | | | | | | | | | | | |
|-----------------|----------------|-----|-----|-------|------|------|-------|----------------|-----|-------|-----|-----|---------------------|-----|-----|-------|----------------|-----|
| | days after BMT | | | | | | | days after BMT | | | | | | | | | | |
| | hADA | | | | | | | mADA | | | | | | | | | | |
| Mo-LTR | 191 | 402 | 191 | 402 | 191 | 402 | 191 | 402 | 191 | 402 | 191 | 402 | 191 | 402 | 191 | 402 | days after BMT | |
| 80% (n=3) | #539 | 0.9 | 1.0 | #540 | 1.4 | 0.7 | #541 | 1.0 | 0.8 | | | | | | | | | |
| Mo-LTR/B2 | 191 | 424 | 191 | 424 | 191 | 424 | 191 | 424 | 191 | 424 | 191 | 424 | 191 | 424 | 191 | 424 | | |
| 82% (n=4) | #544 | 1.8 | 1.5 | #556 | 1.8 | 1.1 | #557 | 1.8 | 2 | #558 | 1.7 | 1.2 | | | | | | |
| Fr-Enh | 184 | 430 | 184 | 430 | 184 | 430 | 184 | 430 | 184 | 430 | 184 | 430 | 184 | 430 | 184 | 430 | | |
| 80% (n=4) | #515 | 1.6 | 1.3 | #516 | 1.4 | 0.8 | #517 | 1.2 | 1.6 | #518 | 1.2 | 0.6 | | | | | | |
| MPSV-LTR | 177 | 361 | 177 | 361 | 177 | ND | 177 | ND | 177 | 411 | 177 | 411 | 177 | 411 | 177 | 411 | | |
| 77% (n=4) | #5126 | 2.2 | 1.7 | #5127 | 2.2 | 2.0 | #5129 | 1.9 | ND | #5141 | ND | ND | #5142 | 2.3 | 1.5 | #5144 | 1.9 | 1.4 |
| α -G-SGC | 170 | 420 | 170 | 420 | 170 | 399 | 170 | 420 | 170 | 420 | 170 | 420 | 170 | 420 | 170 | 420 | | |
| 59% (n=3) | #5117 | 0.6 | 0.4 | #5121 | 0.05 | 0.03 | #5123 | ND | ND | #5118 | 0.8 | 0.4 | Control - no vector | | | | | |
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FIG. 13

A**B****C****D**

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FIG. 14

MoMuLV: GGTGAAACT GACGAGTTGGAAACACCCGGCGCAACCT GggAGACGTCCCCAGGGACTTCCGGGGCGGTTTGTCGGCCGACCT
MfG: XXXXX XXXXX XXXXXXXXXX
MfG-S: XXXXX XXXXX XXXXXXXXXX

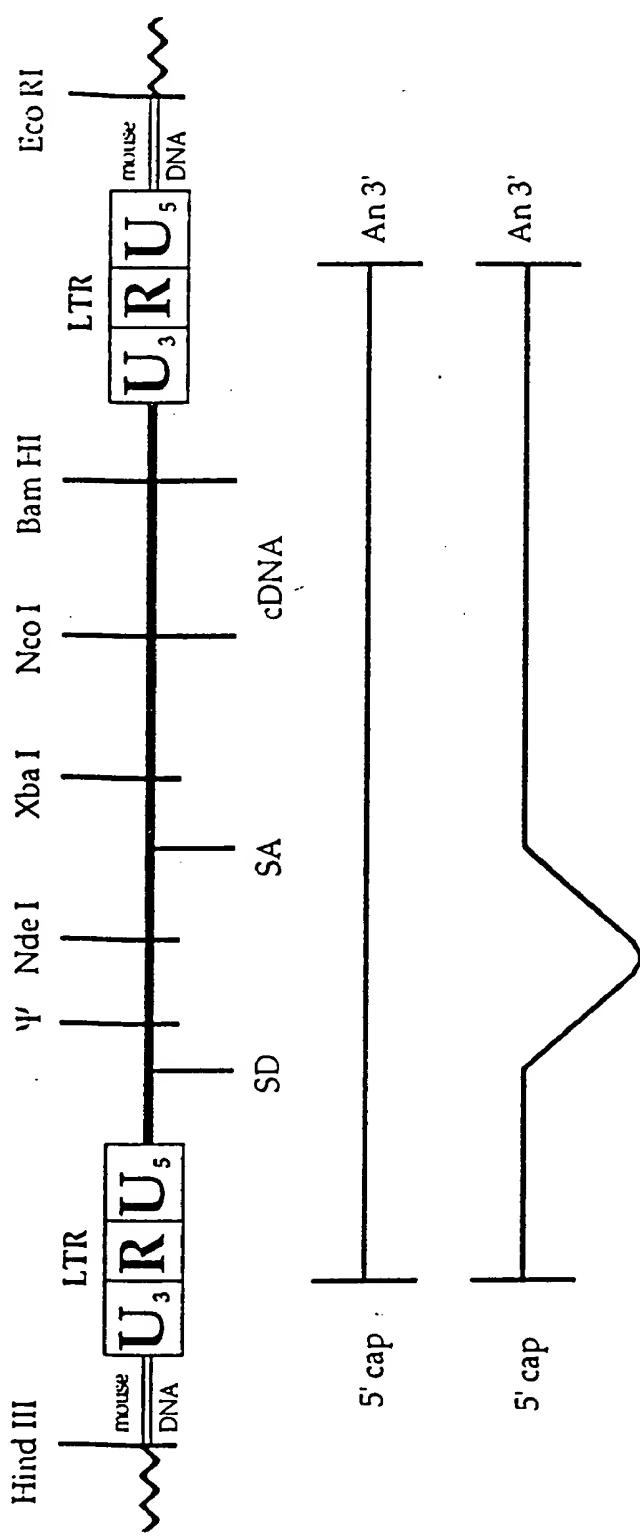
MoMuLV: GAGTC CAAAAATCCCAGTCGTTGGACTCTTGGCACCCCCCTTAAGGGAGGAATATGGGGTCTGGAGGAGCAGGAGAACC
MfG: XXXXX XXXXX XXXXXXXXXX
MfG-S: XXXXX XXXXX XXXXXXXXXX

MoMuLV: TAAACAGTTCCGCCCTCCGCTGAATTTGCTTCTGGTTGGGACCGAACGGCTGGGCGCTCTGGCTGCAGCATCGI
MfG: XXXXX XXXXX XXXXXXXXXX
MfG-S: XXXXX XXXXX XXXXXXXXXX

MoMuLV: TCTGTTGTC CTGACTGTTGAGAAATGGG-----CCAGACTGTTACACTCCCI
MfG: XXXXX XXXXX XXXXXXXXXX
MfG-S: XXXXX XXXXX XXXXXXXXXX

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FIG. 15



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FIG. 16

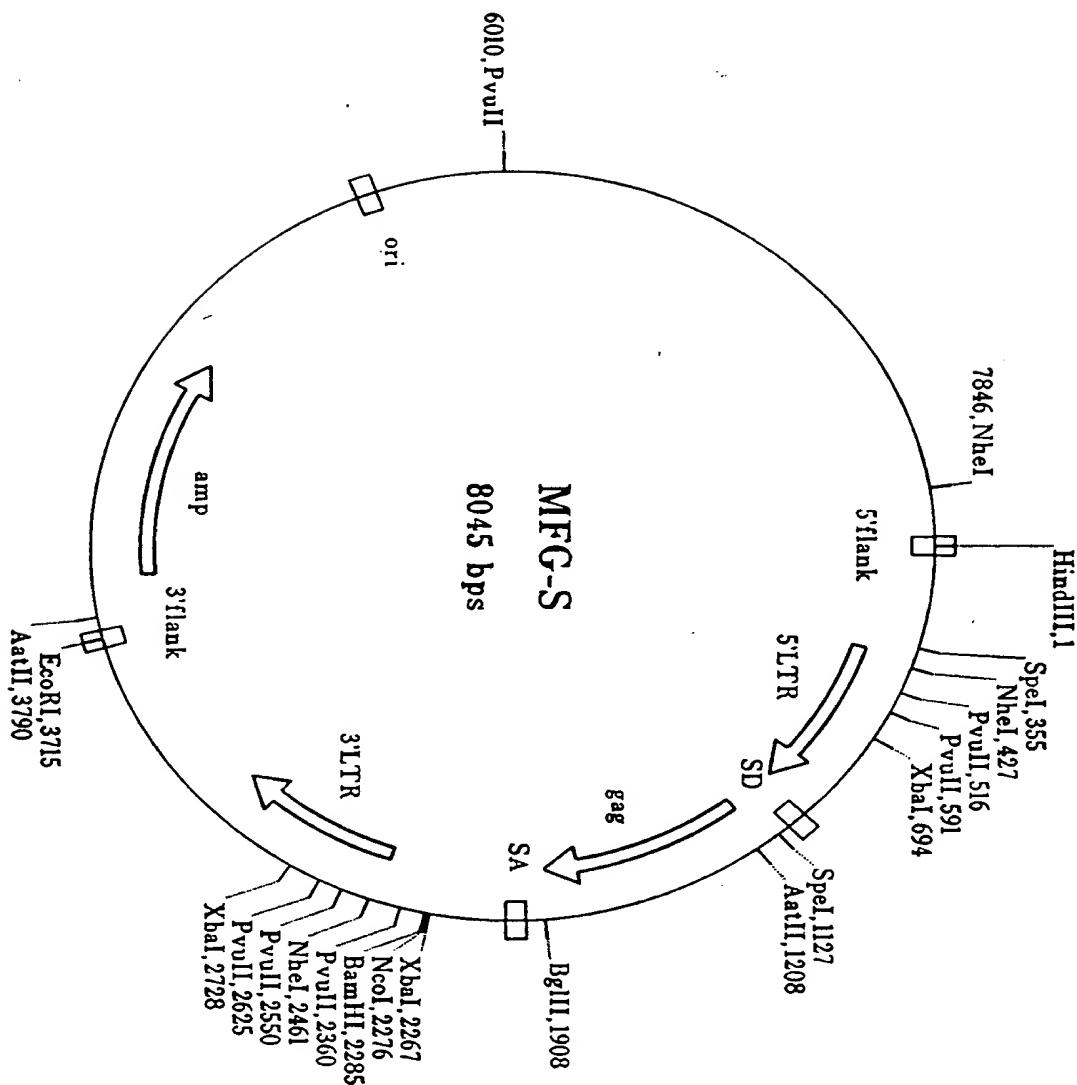


FIG. 17

1 AAGCTTGCT CTTAGGAGTT TCCTAATACA TCCCAAACTC AAATATATAA AGCATTGAC
 TTCGAAACGA GAATCCTCAA AGGATTATGT AGGGTTGAG TTTATATATT TCGTAAACTG
 61 TTGTTCTATG CCCTAGGGGG CGGGGGGAAG CTAAGCCAGC TTTTTTTAAC ATTTAAAATG
 AACAAAGATAC GGGATCCCCC GCCCCCCTTC GATTGGTCG AAAAAAATTG TAAATTTCAC
 121 TTAATTCCAT TTTAAATGCA CAGATGTTT TATTCATAA GGGTTCAAT GTGCATGAAT
 AATTAAGGTA AAATTACGT GTCTACAAAA ATAAAGTATT CCCAAAGTTA CACGTACTTA
 181 GCTGCAATAT TCCTGTTACC AAAGCTAGTA TAAATAAAAA TAGATAAACG TGGAAATTAC
 CGACGTTATA AGGACAATGG TTTCGATCAT ATTTATTTT ATCTATTTGC ACCTTTAATG
 241 TTAGAGTTTC TGTCATTAAC GTTTCCCTCC TCAGTTGACA ACATAAAATGC GCTGCTGAGC
 AATCTCAAAG ACAGTAATTG CAAAGGAAGG AGTCAACTGT TGTATTTACG CGACGACTCG
 301 AAGCCAGTTT GCATCTGTCA GGATCAATT CCCATTATGC CAGTCATATT AATTACTAGT
 TTCGGTCAAA CGTAGACAGT CCTAGTTAAA GGGTAATACG GTCAGTATAA TTAATGATCA
 361 CAATTAGTTG ATTTTATTT TTGACATATA CATGTGAATG AAAGACCCC CCTGTTAGGTT
 GTTAATCAAC TAAAAATAAA AACTGTATAT GTACACTTAC TTTCTGGGT GGACATCCAA
 421 TGGCAAGCTA GCTTAAGTAA CGCCATTTG CAAGGCATGG AAAAATACAT AACTGAGAAT
 ACCGTTCGAT CGAATTTCATT CGGGTAAAC GTTCCGTACC TTTTATGTA TTGACTCTTA
 481 AGAAAAGTTC AGATCAAGGT CAGGAACAGA TGGAACAGCT GAATATGGC CAAACAGGAT
 TCTTTCAAG TCTAGTTCCA GTCCTGTCT ACCTTGTGCA CTTATACCCG GTTGTCCCTA
 541 ATCTGTGGTA AGCAGTTCCCT GCCCGGGCTC AGGGCCAAGA ACAGATGGAA CAGCTGAATA
 TAGACACCCT TCGTCAAGGA CGGGGGCGAG TCCCGTTCT TGTCTACCTT GTCGACTTAT
 601 TGGGCCAAAC AGGATATCTG TGGTAAGCAG TTCTGCCCT GGCTCAGGGC CAAGAACAGA
 ACCCGGTTTG TCCTATAGAC ACCATTGTC AAGGACGGGG CCGAGTCCCG GTTCTTGTCT
 661 TGGTCCCCAG ATGCGGTCCA GCCCTCAGCA GTTTCTAGAG AACCATCAGA TGTTTCCAGG
 ACCAGGGGTC TACGCCAGGT CGGGAGTCGT CAAAGATCTC TTGGTAGTCT ACAAAGGTCC
 721 GTGCCCAAG GACCTGAAAT GACCCTGTGC CTTATTGAA CTAACCAATC AGTCGCTTC
 CACGGGGTTC CTGGACTTTA CTGGGACACG GAATAAACTT GATTGGTTAG TCAAGCGAAG
 781 TCGCTTCTGT TCGCGCGCTT CTGCTCCCCG AGCTCAATAA AAGAGCCCCAC AACCCCTCAC
 AGCGAAGACA AGCGCGCGAA GACGAGGGGC TCGAGTTATT TTCTCGGGTG TTGGGGAGTG
 841 TCGGGCGGCC AGTCCTCCGA TTGACTGAGT CGCCCGGGTA CCCGTGTATC CAATAAAACCC
 AGCCCCGCGG TCAGGAGGCT AACTGACTCA GCGGGCCCAT GGGCACATAG GTTATTGGG
 901 TCTTGCAGTT GCATCCGACT TGTGGTCTCG CTGTTCTTG GGAGGGTCTC CTCTGAGTGA
 AGAACGTCAA CGTAGGCTGA ACACCAAGAGC GACAAGGAAC CCTCCCAGAG GAGACTCACT
 961 TTGACTACCC GTCAGCGGGG GTCTTCATT TGGGGGCTCG TCCGGGATCG GGAGACCCCT
 AACTGATGGG CAGTCGCCCC CAGAAAGTAA ACCCCCGAGC AGGCCCTAGC CCTCTGGGA
 021 GCCCAGGGAC CACCGACCCA CCACCGGGAG GTAAGCTGGC CAGCAACTTA TCTGTGCTG
 CGGGTCCCTG GTGGCTGGGT GGTGGCCCTC CATTGACCG GTCGTTGAAT AGACACAGAC

081. TCCGATTGTC TAGTGTCTAT GACTGATTT ATGCGCCTGC GTCGGTACTA GTTAGCTAAC
 AGGCTAACAG ATCACAGATA CTGACTAAAA TACGCGGACG CAGCCATGAT CAATCGATTG

 141. TAGCTCTGTA TCTGGCGGAC CGGTGGTGG A ACTGACCGAGT TCGGAACACC CGGCCGCAAC
 ATCGAGACAT AGACCGCCTG GGCACCACCT TGACTGCTCA AGCCTTGTGG GCCGGCGTTG

 201. CCTGGGAGAC GTCCCAGGGA CTTCGGGGC CGTTTTGTG GCCCGACCTG AGTCCTAAAA
 GGACCCCTTG CAGGGTCCCCT GAAGCCCCG GCACAAACAC CGGGCTGGAC TCAGGATTTT

 261. TCCCAGATCGT TTAGGACTCT TTGGTGCACC CCCCTTAGAG GAGGGATATG TGTTCTGGT
 AGGGCTAGCA AATCCTGAGA AACACACGTGG GGGGAATCTC CTCCCTATAC ACCAAGACCA

 321. AGGAGACGAG AACCTAAAAC AGTTCCCGCC TCCGTCTGAA TTTTGCTTT CGGTTGGGA
 TCCTCTGCTC TTGGATTTG TCAAGGGCGG AGGCAGACTT AAAAACGAAA GCCAAACCCCT

 381. CCGAAGCCGC GCCGCGCGTC TTGTCTGCTG CAGCATCGTT CTGTGTGTC TCTGTCTGAC
 GGCTTCGGCG CGGCGCGCAG AACAGACGAC GTCGTAGCAA GACACAACAG AGACAGACTG

 441. TGTGTTTCTG TATTGTCTG AAAATATGGG CCCGGGCTAG ACTGTTACCA CTCCCTTAAG
 ACACAAAGAC ATAAACAGAC TTTTATACCC GGGCCCGATC TGACAATGGT GAGGGAAATTC

 501. TTTGACCTTA GGTCACTGGA AAGATGTCGA GCGGATCGCT CACAACCAGT CGGTAGATGT
 AAACTGGAAT CCAGTGACCT TTCTACAGCT CGCCTAGCGA GTGTTGGTCA GCCATCTACA

 561. CAAGAAGAGA CGTTGGGTTA CCTTCTGCTC TGCAGAATGG CCAACCTTTA ACGTCGGATG
 GTTCTTCTCT GCAACCCAAT GGAAGACGAG ACGTCTTACC GGTTGGAAAT TGCAGCCTAC

 621. GCCGCGAGAC GGCACCTTTA ACCGAGACCT CATCACCCAG GTTAAGATCA AGGTCTTTTC
 CGGCGCTCTG CGGTGGAAAT TGGCTCTGGA GTAGTGGGTC CAATTCTAGT TCCAGAAAAG

 681. ACCTGGCCCCG CATGGACACC CAGACCAGGT CCCCTACATC GTGACCTGGG AAGCCTTGGC
 TGGACCGGGC GTACCTGTGG GTCTGGTCCA GGGGATGTAG CACTGGACCC TTCGGAACCG

 741. TTTTGACCCCC CCTCCCTGGG TCAAGCCCTT TGTACACCCCT AAGCCTCCGC CTCCCTTTCC
 AAAACTGGGG GGAGGGACCC AGTTGGGAA ACATGTGGGA TTCGGAGGCG GAGGAGAAGG

 801. TCCATCCGCC CCGTCTCTCC CCCTTGAACC TCCTCGTTCG ACCCCGCCCTC GATCCTCCCT
 AGGTAGGCAGGG GGCAGAGAGG GGGAACTTGG AGGAGCAAGC TGGGGCGGAG CTAGGAGGGA

 861. TTATCCAGCC CTCACTCCTT CTCTAGGCGC CCCCATATGG CCATATGAGA TCTTATATGG
 AATAGGTCGG GAGTGAGGAA GAGATCCGCG GGGGTATAACC GGTATACTCT AGAATATACC

 921. GGCACCCCCCG CCCCTTGTAA ACTTCCCTGA CCCTGACATG ACAAGAGTTA CTAACAGCCC
 CCGTGGGGGC GGGGAACATT TGAAGGGACT GGGACTGTAC TGTTCTCAAT GATTGTCGGG

 981. CTCTCTCCAA GCTCACTTAC AGGCTCTCTA CTTAGTCCAG CACGAAGTCT GGAGACCTCT
 GAGAGAGGTT CGAGTGAATG TCCGAGAGAT GAATCAGGTC GTGCTTCAGA CCTCTGGAGA

 041. GGCAGGAGCC TACCAAGAAC AACTGGACCG ACCGGTGGTA CCTCACCCCTT ACCGAGTCGG
 CCGCCGTCGG ATGGTTCTTG TTGACCTGGC TGGCCACCAT GGAGTGGAA TGGCTCAGCC

 101. CGACACAGTG TGGGTCCGCC GACACCAGAC TAAGAACCTA GAACCTCGCT GGAAAGGACC
 GCTGTGTCAC ACCCAGGCGG CTGTGGTCTG ATTCTTGGAT CTTGGAGCGA CCTTCCCTGG

 161. TTACACAGTC CTGCTGACCA CCCCCACCGC CCTCAAAGTA GACGGCATCG CAGCTTGGAT
 AATGTGTCAG GACGACTGGT GGGGGTGGCG GGAGTTTCAT CTGCCGTAGC GTCGAACCTA

 221. ACACGCCGCC CACGTGAAGG CTGCCGACCC CGGGGGTGG A CCATCCTCTA GACTGCCATG
 TGTGCGGCCGG GTGCACTTCC GACGGCTGGG GCCCCCACCT GGTAGGAGAT CTGACGGTAC

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281. GCGCGGATCC GGATTAGTCC AATTTGTTAA AGACAGGATA TCAGTGGTCC AGGCTCTAGT
CGCGCTAGG CCTAATCAGG TTAAACAATT TCTGTCCTAT AGTCACCAGG TCCGAGATCA

341 TTTGACTCAA CAATATCACC AGCTGAAGCC TATAGAGTAC GAGCCATAGA TAAAATAAAA
AAACTGAGTT GTTATAGTGG TCGACTTCGG ATATCTCATG CTCGGTATCT ATTTTATTTT

401 GATTTTATTT AGTCTCCAGA AAAAGGGGGG AATGAAAGAC CCCACCTGTA GGTGTTGGCAA
CTAAAATAAA TCAGAGGTCT TTTTCCCCCCC TTACTTCTG GGGTGGACAT CCAAACCGTT

461 GCTAGCTTAA GTAACGCCAT TTTGCAAGGC ATGGAAAAAT ACATAACTGA GAATAGAGAA
CGATCGAATT CATTGCGGTAA AACCGTTCCG TACCTTTTA TGTATTGACT CTTATCTCTT

521 GTTCAGATCA AGGTCAAGGAA CAGATGGAAC AGCTGAATAT GGGCCAACAA GGATATCTGT
CAAGTCTAGT TCCAGTCCTT GTCTACCTTG TCGACTTATA CCCGGTTTGT CCTATAGACA

581 GGTAAGCAGT TCCTGCCCG GCTCAGGGCC AAGAACAGAT GGAACAGCTG AATATGGGCC
CCATT CGTCA AGGACGGGGC CGAGTCCCGG TTCTTGTCTA CCTTGTGAC TTATACCCGG

641 AAACAGGATA TCTGTGGTAA GCAGTTCCTG CCCC GGCTCA GGGCCAAGAA CAGATGGTCC
TTTGTCCAT AGACACCATT CGTCAAGGAC GGGGCCAGT CCCGGTTCTT GTCTACCAGG

701 CCAGATGCGG TCCAGCCCTC AGCAGTTCT AGAGAACCAT CAGATGTTTC CAGGGTGC
GGTCTACGCC AGGTGGGAG TCGTCAAAGA TCTCTGGTA GTCTACAAAG GTCCCACCGGG

761 CAAGGACCTG AAATGACCCCT GTGCCTTATT TGAACTAACC AATCAGTTCG CTTCTCGCTT
GTTCTGGAC TTTACTGGGA CACGGAATAA ACTTGATTGG TTAGTCAAGC GAAGAGCGAA

821 CTGTTCGCGC GCTTCTGCTC CCCGAGCTCA ATAAAAGAGC CCACAACCCCC TCACTCGGGG
GACAAGCGCG CGAACGAG GGGCTCGAGT TATTTTCTG GGTGTTGGGG AGTGAGCCCC

881 CGCCAGTCCT CCGATTGACT GAGTCGCCCG GGTACCCGTG TATCCAATAA ACCCTCTTGC
GCGGTCAAGGA GGCTAACTGA CTCAGGGGC CCATGGCAC ATAGGTTATT TGGGAGAACG

941 AGTTGCATCC GACTTGTGGT CTCGCTGTT CTTGGGAGGG TCTCCTCTGA GTGATTGACT
TCAACGTAGG CTGAACACCA GAGCGACAAG GAACCCCTCCC AGAGGAGACT CACTAACTGA

001 ACCCGTCAGC GGGGGTCTTT CACACATGCA GCATGTATCA AAATTAATTT GTTTTTTTT
GGGCAGTCG CCCCCAGAAA GTGTGTACGT CGTACATAGT TTTAATTAAA CCAAAAAAAA

061 CTTAAGTATT TACATTAAAT GGCCATAGTA CTTAAAGTTA CATTGGCTTC CTTGAAATAA
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121 ACATGGAGTA TTCAGAATGT GTCATAAATA TTTCTAATTT TAAGATAGTA TCTCCATTGG
TGTACCTCAT AAGTCTTACA CAGTATTAT AAAGATTAATA ATTCTATCAT AGAGGTAACC

181 CTTTCTACTT TTTCTTTTAT TTTTTTTGT CCTCTGTCTT CCATTTGTTG TTGTTGTTGT
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241 TTGTTTGTGTT GTTTGTTGGT TGGTTGGTTA ATTTTTTTT AAAGATCCTA CACTATAGTT
AACAAACAAA CAAACAACCA ACCAACCAAT TAAAAAAA TTTCTAGGAT GTGATATCAA

301 CAAGCTAGAC TATTAGCTAC TCTGTAACCC AGGGTGACCT TGAAGTCATG GGTAGCCTGC
GTTCGATCTG ATAATCGATG AGACATTGGG TCCCACGTGA ACTTCAGTAC CCATCGGACG

361 TGTTTAGCC TTCCCACATC TAAGATTACA GGTATGAGCT ATCATTGTTG GTATATTGAT
ACAAAATCGG AAGGGTGTAG ATTCTAATGT CCATACTCGA TAGAAAAAC CATATAACTA

421 TGATTGATTG ATTGATGTGT GTGTGTGTGA TTGTGTTGT GTGTGTGANT GTGWANATGT
ACTAACTAAC TAACTACACA CACACACACT AACACAAACA CACACACTNA CACWTNTACA

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481. GTGTATGGNT GTGTGTGAKT GTGTGTATGT ATGNYTGTGT GTGANTGYGT GTGTGTGANT
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 601. GTGTGTGTGT GTGTGTGTGT GTGTGTGTG AAAAAATATT CTATGGTAGT GAGAGCCAAC
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 661. GCTCCGGCTC AGGTGTCAGG TTGGTTTTG AGACAGAGTC TTTCACTTAG CTTGGAATTC
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 AACTCTGCT TTCCCAGAGC ACTATGCGGA TAAAAATATC CAATTACAGT ACTATTATTA
 781. GGTTTCTTAG ACGTCAGGTG GCACCTTCG GGGAAATGTG CGCGGAACCC CTATTGTTT
 CCAAAGAACG TGCACTCCAC CGTAAAAAGC CCCTTACAC GCGCCTTGGG GATAAACAAA
 841. ATTTTCTAA ATACATTCAA ATATGTATCC GCTCATGAGA CAATAACCCCT GATAAATGCT
 TAAAAAGATT TATGTAAGTT TATACATAGG CGAGTACTCT GTTATTGGGAA CTATTACGA
 901. TCAATAATAT TGAAAAAGGA AGAGTATGAG TATTCAACAT TTCCGTGTCG CCCTTATTCC
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 961. CTTTTTGCG GCATTTGCC TTCCTGTTTG TGCTCACCCA GAAACGCTGG TGAAAGTAAA
 GAAAAAACGC CGTAAAACGG AAGGACAAAA ACGAGTGGGT CTTGCGACC ACTTTCATTT
 021. AGATGCTGAA GATCAGTTGG GTGCACGGAGT GGGTTACATC GAACTGGATC TCAACAGCGG
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 081. TAAGATCCTT GAGAGTTTTC GCCCGGAAGA ACGTTTCCA ATGATGAGCA CTTTTAAAGT
 ATTCTAGGAA CTCTAAAAG CGGGGCTTCT TGCAAAAGGT TACTACTCGT GAAAATTCA
 141. TCTGCTATGT GGCGCGGTAT TATCCCGTGT TGACGCCGG CAAGAGCAAC TCGGTGCCG
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 201. CATAACTAT TCTCAGAATG ACTTGGTTGA GTACTCACCA GTCACAGAAA AGCATCTTAC
 GTATGTGATA AGAGTCTTAC TGAACCAACT CATGAGTGGT CAGTGTCTT TCGTAGAATG
 261. GGATGGCATG ACAGTAAGAG AATTATGCAG TGCTGCCATA ACCATGAGTG ATAACACTGC
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 321. GGCCAACCTTA CTTCTGACAA CGATCGGAGG ACCGAAGGAG CTAACCGCTT TTTTGACCAA
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 381. CATGGGGGAT CATGTAACCTC GCCTTGATCG TTGGGAACCG GAGCTGAATG AAGCCATACC
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 561. TAAAGTTGCA GGACCACTTC TGCGCTCGGC CCTTCCGGCT GGCTGGTTA TTGCTGATAA
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 861 GAAGATCCTT TTTGATAATC TCATGACCAA AATCCCTTAA CGTGAGTTTT CGTTCCACTG
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 581 CTTTTGCTGG CCTTTTGCTC ACATGTTCTT TCCTGCGTTA TCCCCTGATT CTGTGGATAA
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 781 TAGCGAGGTG CCGCCGGCTT CCATTCAAGGT CGAGGTGGCC CGGCTCCATG CACCGCGACG
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 021 GGACAGCATG GCCTGCAACG CGGGCATCCC GATGCCGCC GAAGCGAGAA GAATCATAAT
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7081 GGGGAAGGCC ATCCAGCCTC GCGTCGGCAA CGCCAGCAAG ACGTAGCCCA GCGCGTCGGC
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7201 GAAGGCTTGA GCGAGGGCGT GCAAGATTCC GAATACCGCA AGCGACAGGC CGATCATCGT
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7261 CGCGCTCCAG CGAAAGCGGT CCTCGCCGAA AATGACCCAG AGCGCTGCCG GCACCTGTCC
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7381 CCACCGGAAG GAGCTGACTG GGTTGAAGGC TCTCAAGGGC ATCGGTCGAC GCTCTCCCTT
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7501 CGCAAGGAAT GGTGCATGCA AGGAGATGGC GCCAACAGT CCCCCGGCCA CGGGGCCTGC
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041 CATTA
GTAAT